

Amendments to the Specification

Please substitute the following paragraphs for the pending paragraphs.

Please substitute the first full paragraph on page 3 of the English translation of the specification with the following paragraph:

The present invention further provides a process for extracting Sequoyitol from *Taxus spp.*, said process comprising: extracting *Taxus spp* with organic solvents to obtain an extract, subjecting the extract to a diphasic extraction and then column chromatography to collect fractions containing Sequoyitol, then concentrating, filtrating, drying, and recrystallizing to obtain a powder containing Sequoyitol, wherein the organic solvent used for extraction comprises ethanol, methanol, acetone, and aqueous mixtures thereof, the solvents used for diphasic extraction are water insoluble organic solvents, such as ethyl acetate, chloroform, dichloromethane, ethyl ether. The purification can be conducted by using various chromatographic and recrystallization methods alone or in combination manner. The solvent system of recrystallization is a solvent system comprising ethanol, acetone, methylethylketone. The chromatography may use macroporous resin columns (type D101, type [[NM]]MN-200, etc.), polyglucose or modified glucose columns (Sephadex G or Sephadex-LH-20, etc.), cellulose columns, activated carbon columns, etc. The final product is a crystalline powder, wherein the main effective component is Sequoyitol with a content of more than 90%.

Please substitute the second paragraph that begins on page 4 and ends on page 5 of the English translation of the specification with the following paragraph:

More specifically, the process of the present invention to extract antidiabetic Sequoyitol from *Taxus spp* comprises: pulverizing the root, stem or leaf of *Taxus spp* to obtain a crude powder; extracting the crude powder with a solvent such as ethanol, methanol,

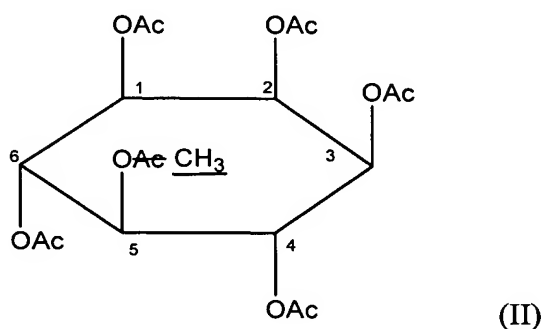
acetone or aqueous mixture thereof at a temperature from 0°C to reflux temperature, preferably at a temperature from room temperature to reflux temperature, more preferably at reflux temperature, for one to five times, wherein the amount of solvent is from 1:1 to 1:20 (weight/volume), preferably from 1:2 to 1:10 (weight/volume), more preferably from 1:3 to 1:6; concentrating in vacuum to obtain an extract, subjecting said extract to a diphasic extraction between water and water insoluble organic solvent (such as ethyl acetate, chloroform, dichloromethane, ethyl ether)/, and removing lipophilic organic layer, wherein the extract is preferably organic solvent/water having a ratio of from 1:0.5 to 1:10; merging water layers, filtering, and separating with chromatography, wherein the examples of chromatography column are: macroporous resin columns such as D101 type, [[NM]]MN-200 type (PUROLITE), etc., polyglucose G or modified polyglucose columns such as Sephadex-LH-20, etc., cellulose columns, and activated carbon columns, the corresponding eluents are used, and the elution is detected simultaneously; collecting elute fractions containing Sequoyitol, concentrating in vacuum, standing, and filtering to obtain a solid, then recrystallizing said solid with a solvent system such as ethanol, methanol, acetone, methylethylketone, and drying to obtain a Sequoyitol powder. The final product is a crystalline powder having a Sequoyitol content of more than 90%.

Please substitute the first full paragraph on page 11 of the English translation of the specification with the following paragraph:

3. Structure identification of pentaacetyl-sequoyitol (Ac-sequoyitol)

The compound Ac-sequoyitol is a colorless massive crystal; MP 201-202 °C; C₁₇H₂₄O₁₁, ESI(+)-MS(m/z): 427.1[M+Na]⁺; ¹H-NMR(CDCl₃, 300MHz, ppm): 5.54 (1H, t, J=2.8, H-2); 5.45(2H, t, J=10.05, H-4 and H-6); 5.01(2H, dd, J=2.8, 10.5, H-1 and H-3); 3.42(1H, t, J=9.7, H-5), 3.45(3H, s, OCH₃); 2.16(3H, s, C₂-OAc); 2.08(6H, s, OAc × 2); 1.99(6H, s, OAc × 2). ¹³C-NMR(CDCl₃, 75MHz, ppm): 169.85 (1C, C₂-OCOCH₃), 169.63 (2C, OCOCH₃ × 2), 169.41 (2C, OCOCH₃ × 2), 80.08 (1C, C-5), 70.60 (2C, C-4+C-6), 68.78 (2C, C-1+C-3), 68.36 (1C, C-2), 60.02(1C, OCH₃), 20.39, 20.67(total 5C,

OCOCH₃ × 5). The ¹H-¹H COSY, ¹H-¹³C COSY, ¹H-¹³C COLOG long range correlated spectroscopy of Ac-sequoyitol were measured, and the ¹H and ¹³C data of said compound were assigned. Compared with Sequoyitol, the molecular weight of Ac-sequoyitol was increased by 210 (corresponding to the mass of 5 acetyl groups). The data indicated that Ac-sequoyitol was a pentaacetyl derivative of Sequoyitol and had the following structure formula;



Please substitute the first paragraph on page 15 of the English translation of the specification with the paragraph:

As compared to normal group, the blood-sugar level of the mice of the control group highly significantly increased (increased 308.2 mg/dl). As compared to the control group, the hyperglycemia of 25 mg/kg Sequoyitol group was alleviated (decreased 95.6 mg/dl), and the alloxan-induced hyperglycemia of 50 and 100 mg/kg of Sequoyitol groups and phenformine group was highly significantly alleviated. The effect of Sequoyitol for alleviating hyperglycemia was dose dependent. The effects of 100 mg/kg of Sequoyitol group (decreased 306.8 mg/dl) and 50 mg/kg of Sequoyitol group (decreased 195.2 mg/dl) were superior to that of 75 mg/kg phenformine group (decreased 152.8 mg/dl). The histopathologic examination of pancreatic glands indicated that the pancreatic islands of normal group were massive cords shape with clear boundary,

wherein islet cells were polygonal shape with abundant cytoplasm and a central round nucleus. There were a great number of pancreatic islands and a great number of cells in islands, interstitial small vessels did not significantly change, and inflammatory cell infiltration was not obvious. As to the control group, the number of pancreatic islands decreased significantly, the size of pancreatic island reduced, the number of cells in pancreatic island decreased, and size of said cells reduced, the hyalinization of interstitial small vessels and inflammatory cell infiltration were obvious. As compared to the model group, the number of pancreatic islands and the number of islet cells of Sequoyitol groups increased significantly, while the number of pancreatic islands and the number of islet cells of phenformine group increased slightly. The results of histopathologic examination confirmed that the effect of Sequoyitol was superior to that of phenformine.

Please substitute the first paragraph on page 16 of the English translation of the specification with the following paragraph:

1. Experimental method^[3]

50 ~~[[60]]~~ Mice were randomly divided into 5 groups, wherein 4 groups were orally administrated with 25, 50 and 100 mg/kg of Sequoyitol and 50 mg/kg of Glibenclamide according to 0.1 ml/10g of body weight, respectively, and the normal group was administrated with the same ~~volum of the same volum~~ volume of distilled water. These administrations were conducted for continuous 7 days. The blood-sugar levels were detected by glucose oxidase method.

Please substitute the first full paragraph on page 17 of the English translation of the specification with the following paragraph:

2. Results

As compared to normal group, the blood-sugar level of the mice of the control group highly significantly increased. As compared to the control group, the adrenalin-induced hyperglycemia of Sequoyitol groups (decreased 32.2, 35.5, 39.9 mg/dl) and Glibenclamide group (decreased 40.1 mg/dl) was significantly alleviated. In the meantime, the hepatic glycogen level of the control group highly significantly decreased. As compared to the control group, the 25 mg/kg of Sequoyitol group (increased 1.76 mg/g of liver tissue) and the 100 mg/kg of Sequoyitol group (increased 1.24 mg/g of liver tissue) highly increased the hepatic glycogen level, while the 50 [[20]] mg/kg of Sequoyitol group (increased 1.02 [[1.24]] mg/g of liver tissue) and Glibenclamide group (increased 1.28 mg/g of liver tissue) significantly increased the hepatic glycogen level.